"The Most Efficiently Run Big City in California"

THE CITY OF SAN DIEGO

WATER TREATMENT PLANT INVENTORY CHECKLIST

A. Identification (Please Print):

1. Facility Name	2. Facility Location (Street Address)	3. Plant Number
4. Inspector Name	5. Inspection Date	4. GPS coordinates
6. Treatment Plant Construction Date	7. Treatment Plant Construction Cost ($)	8. Treatment Plant Total Capacity

B. Pump

Pump

	1	2	3	4	5
Asset No.					
Location					
Manufacturer					
Model No.					
Serial No.					
Type					
Capacity (gpm)					
Total Dynamic Head (ft)					
Seal Type					
Date Installed					
Refurbishment Type					
Refurbished Date					
Condition Assessment (Scale: 1 to 5)					
Notes:					
Capacity Assessment (Scale: 1 to 5)					
Notes:					

C. Motor

Motor

	1	2	3	4	5
Asset No.					
Location					
Manufacturer					
Model No.					
Serial No.					
Date Installed					
Motor Type					
Motor Orientation					
HP					
Voltage					
Full Load Amps					
RPM					
Run Time (hours)					
Refurbishment Type					
Refurbishment Date					
Condition Assessment (Scale: 1 to 5)					
Notes:					
Capacity Assessment (Scale: 1 to 5)					
Notes:					

D. Blower

Blower

	1	2	3	4	5
Asset No.					
Location					
Manufacturer					
Model No.					
Serial No.					
Date Installed					
Blower Type					
Blower Size					
Capcity (CFM)					
Date Installed					
Condition Assessment (Scale: 1 to 5)					
Notes:					

E. Mechanical Piping

Process Pipe

	1	2	3	4	5
Location					
Asset No.					
Pipe Diameter (in)					
Pipe Length (ft)					
Pipe Material					
Date Installed					
Condition Assessment (Scale: 1 to 5)					
Notes:					

F. Valve

Plug Valve

	1	2	3	4	5
Asset No.					
Location					
Manufacturer					
Model					
Size (in)					
Type					
Date Installed					
Condition Assessment (Scale: 1 to 5)					
Notes:					

Gate Valve

	1	2	3	4	5
Asset No.					

Location					
Manufacturer					
Model					
Size (in)					
Date Installed					
Type					
Condition Assessment (Scale: 1 to 5)					
Notes:					

Check Valve

	1	2	3	4	5
Asset No.					
Location					
Manufacturer					
Model					
Size (in)					
Date Installed					
Type					
Condition Assessment (Scale: 1 to 5)					
Notes:					

Butterfly Valve

	1	2	3	4	5
Asset No.					
Location					
Manufacturer					
Model					
Size (in)					
Date Installed					
Type					
Condition Assessment (Scale: 1 to 5)					
Notes:					

Valve Operator

	1	2	3	4	5
Asset No.					
Location					
Date Installed					
Operation Type (Manual, motorized, pneumatic)					
Size					
Manufacturer					
Model No.					
Condition Assessment (Scale: 1 to 5)					
Notes:					

G. Meter

Flow Meter (Process)

	1	2	3	4	5
Asset No.					
Location					
Meter No.					
Type					
Manufacturer					
Serial No.					
Model No.					
Date Installed					
Condition Assessment (Scale: 1 to 5)					
Notes:					

H. Mixer

Mixer (Flocculator)

	1	2	3	4	5
Asset No.					
Type					
Size (hp)					
Date Installed					
Manufacturer					
Condition Assessment (Scale: 1 to 5)					
Notes:					

I. Tank

Chemical Storage Tank

	1	2	3	4	5
Asset No.					
Volume (gal)					
Material					
Type					
Date Installed					
Condition Assessment (Scale: 1 to 5)					
Notes:					

J. Gate

Sluice Gate

	1	2	3	4	5
Asset No.					
Dimensions					
Material					
Manufacturer					
Type					
Operator Type (Manual, Automated)					
Date Installed					
Condition Assessment (Scale: 1 to 5)					
Notes:					

K. Electrical Service

Transformer

	1	2	3	4	5
Asset No.					
Manufacturer					

Serial Number					
Model Number					
Size / Capacity					
Date Installed					
Cooling Type					
Primary Voltage					
Secondary Voltage					
Condition Assessment (Scale: 1 to 5)					
Notes:					

Motor Control Center (MCC)	1	2	3	4	5
Asset No.					
Number of Cubicles (Buckets)					
Date Installed					
Manufacturer					
Serial No.					
NEMA Rating					
Breaker Manufacturer					
Breaker Serial No.					
Breaker Size (Amps)					
Breaker Trip Size					
Power Monitor (If applicable)					
Overall MCC Condition Assessment (Scale: 1 to 5)					
Notes:					

Supervisory Control / SCADA	1	2	3	4	5
Asset No.					
SCADA Type (PLC / DCS)					
Manufacturer					
Date Installed					
Version					
Last Updated Date					

Variable Frequency Drive (VFD)	1	2	3	4	5
Asset No.					
Type					
Manufacturer					
Size (HP)					
Model					
Serial No.					
Date Installed					

Level Detector	1	2	3	4	5
Asset No.					
Type (Bubbler, ultrasonic)					
Date Installed					
Location					
Manufacturer					
Modle No.					
Condition Assessment (Scale: 1 to 5)					
Notes:					

Carbon Analyzer	1	2	3	4	5
Asset No.					
Date Installed					
Location					
Manufactuer					
Model No.					
Condition Assessment (Scale: 1 to 5)					
Notes:					

Control Panel	1	2	3	4	5
Asset No.					
Date Installed					
Location					
Type					
Manufacturer					
Model No.					
Condition Assessment (Scale: 1 to 5)					
Notes:					

L. Emergency Power

Generator	1	2	3	4	5
Asset No.					
Manufacturer					
Model Number					
Serial Number					
Date Installed					
Rating (kW)					
kVA					
Fuel Type					
HP					
Run Time (hrs)					
Fuel Reserve (Gal)					
Load Test Fequency (monthly)					
Date of Last Load Test					
Condition Assessment (Scale: 1 to 5)					
Notes:					
Capacity Assessment (Scale: 1 to 5)					
Notes:					

Automatic Transfer Switch	1	2	3	4	5

Manufacturer					
Serial No.					
Size (Amps)					
Date Installed					

M. Structure (Non-process)

Structure	1	2	3	4	5
Type (Office, lab, warehouse, etc.)					
Construction Material					
Approximate Size (sq. ft)					
Roof Material					
Asset No.					
Levels					
Refurbishment Type					
Refurbishment Date					
Structural Condition Assessment (Scale: 1 to 5)					
Notes:					
Roof Condition Assessment (Scale: 1 to 5)					
Notes:					
Paint (Corrosion Control) Condition Assessment (Scale: 1 to 5)					
Notes:					

N. Process Structure

Process Structure	1	2	3	4	5
Construction Material					
Approximate Size (sq. ft)					
Asset No.					
Function					
Date Constructed					
Structural Condition Assessment (Scale: 1 to 5)					
Notes:					

Filter	1	2	3	4	5
Capacity (gal/day)					
Asset No.					
Material					
Media Type					
Number of Cells/Size					
Filter Condition Assessment (Scale: 1 to 5)					
Notes:					

O. HVAC

HVAC	1	2	3	4	5
Asset No.					
Location					
Condensing Unit Manufacturer					
Condensing Unit Serial No.					
Capacity (BTUs)					
Controller Manufacturer + Model					
Controller Serial Number					
Date Installed					
HVAC Condition Assessment (Scale: 1 to 5)					
Notes:					
HVAC Capacity Assessment (Scale: 1 to 5)					
Notes:					

P. Site Improvements

Site Improvement	1	2	3	4	5
Road Type (Paved/Unpaved, material)					
Approximate Road Length (ft.)					
Fencing Type					
Fence Length (ft.)					
Parking (Paved/Unpaved)					
Approximate Parking Area (sq. ft.)					
Lighting (Yes / No)					
Security System Type					
Road Condition Assessment (Scale: 1 to 5)					
Notes:					
Fencing Condition Assessment (Scale: 1 to 5)					
Notes:					
Parking Area Condition Assessment (Scale: 1 to 5)					
Notes:					
Site (Landscaping) Condition Assessment (Scale: 1 to 5)					
Notes:					

Q. Clear Well

Clear Well	1	2	3
Date Constructed*			
Asset Number			
Construction Material (e.g., steel, concrete, etc.)*			
Capacity (MG)*			
Refurbishment (if applicable)			
Activity			

Date			
Cost			

Configuration

☐ Elevated	☐ Elevated	☐ Elevated
☐ Above ground	☐ Above ground	☐ Above ground
☐ Mid grade	☐ Mid grade	☐ Mid grade
☐ Below grade	☐ Below grade	☐ Below grade

SCADA ☐ (If SCADA exists, please indicate it with a check mark)

Condition Assessment* (Scale: 1 to 5)			
Notes:			

Condition Assessment Scale:
1. Asset Unserviceable (Over 50% of asset requires replacement)
2. Requires Renewal (Significant renewal/upgrade required

Capacity Assessment ☐ (If capacity problem exists, please indicate it with a check mark)

***Required entry**

R. Collector Mechanism

Collector mechanism	1	2	3	4	5
Asset No.					
Date Installed					
Type (Traveling bridge, chain and flight)					
Manufacturer					
Condition Assessment (Scale: 1 to 5)					
Notes:					

S. Scrubber

Chlorine Scrubber System	1	2	3	4	5
Asset No.					
Date Installed					
Capacity (cfm)					
Type					
Manufacturer					
Model No.					
Condition Assessment (Scale: 1 to 5)					
Notes:					

T. Air Compressor

Air Compressor	1	2	3	4	5
Asset No.					
Date Installed					
Capacity (gal)					
Power (hp)					
Location					
Condition Assessment (Scale: 1 to 5)					
Notes:					

U. Launderer / Wier

Launderer / Wier	1	2	3	4	5
Asset No.					
Date Installed					
Condition Assessment (Scale: 1 to 5)					
Notes:					

V. Gear Box

Gear Box	1	2	3	4	5
Asset No.					
Date Installed					
Location					
Gear Ratio					
Model Size					
Type (Right angle, etc.)					
Condition Assessment (Scale: 1 to 5)					
Notes:					

W. Others

Other Significant Assets	1	2	3	4	5

Condition Assessment Scale

1 Asset Unserviceable (Over 50% of asset requires replacement)
2 Requires Renewal (Significant Renewal/Upgrade Required; 20-40%)
3 Maintenance Required to Return to Acceptable Level of Service (Significant maintenance required; 10-20%)
4 Minor Defects Only (Minor maintenance required; 5% or less)
5 Very Good Condition (Only normal maintenance required)

Capacity Assessment Scale

1 Insufficient Capacity
2 76 to 100% Utilized
3 51 to 75% Utilized
4 26 to 50% Utilized
5 0 to 25% Utilized